

Can't
claim 32, which is backsprayed or back-cast with component (1) as set forth in claim 32 or with a polyurethane foam, or which is laminated onto a molding comprising component (1) as set forth in claim 32, or a polyurethane foam.--

REMARKS

The examiner will note that the term polyamide has replaced the phrase "same molding compounds." In claim 27, which replaced claim 5, the overall thickness of the laminate now reads "100 to 1000 μm ."

The examiner will note that certain of the claims contain an additional feature in that the layers are (co)extruded. This means that each of the layers may be extruded separately and combined afterwards to form the laminated sheet or film, or the different layers can be coextruded. The corresponding teaching can be found in the specification on page 27, line 15, line 20 and page 28, lines 7-9, as well as the examples. Furthermore, please refer to page 32, lines 10-15 and 25.

It is not individually disclosed that each of the different layers may be extruded and combined afterwards. On page 28, lines 7-9, however, it is expressed that films or sheets of the individual components can be produced first of all by known processes. Since the whole section of the application deals with extrusion, especially coextrusion, it is readily apparent that each of the layers may be extruded separately and combined afterwards. This combination can be performed for example by passing the layers through a heatable roll nip, see page 28, lines 3-12. The preferred process is the

coextrusion, especially the adapter coextrusion or die coextrusion, see page 27, lines 14-18 of the specification.

Extruded polymer layers always have an orientation, so that the layers or films are oriented layers or oriented films. The whole laminated sheet or film is consequently an oriented laminated sheet or film due to the extrusion of the different components. This is contrasted to a cast polymer film which is formed from a solution of the polymer by evaporating the solvent. Cast polymer films are totally unoriented, see for example U.S. Re. 35,894.

The laminated sheets or films according to the present invention are directly obtained from the polymers by forming them without dissolving them first. The laminated sheets or films may be prepared by extrusion and laminating in a heatable roll nip or by coextrusion, especially adapter coextrusion or die coextrusion.

The present invention is based on the finding that laminated sheets or films may be formed by extrusion of the different layers or by coextrusion of the whole system of layers. It has been found by the inventors that thin and even very thin polymer films may be formed by extrusion. Until the present invention very thin polymer films were formed by liquid casting of polymer solutions. The laminated sheets or films according to the present invention are oriented laminated sheets or films due to the (co)extruded layers.

In addition to the comments previously submitted to the examiner with respect to

the prior art, the examiner's attention is also directed to the following facts. U.S. Re. 35,894 (Ellison) relates to injection molded plastic articles with integral weatherable pigmented film surface. The films formed according to Ellison are substantially molecularly unoriented cast films and thus liquid cast films and not melt cast films or films formed by melt extrusion, see col. 4, lines 1-4. Thus, the films according to Ellison are totally different from the films according to the present invention which are formed by melt extrusion. Consequently, the present invention is contrasted to the liquid cast film formation according to Ellison.

Furthermore, the liquid cast film according to Ellison is connected to a bonding layer by using an adhesive layer, see col. 5, line 50 to col. 6, line 11. The combination of liquid cast film, adhesive layer and bonding layer is placed into a mold and injection molded with a polymer substrate. The liquid cast film contains large amounts of pigments which absorb UV light, so that no UV light is passed to the polymer substrate, see col. 4, lines 5-22. Consequently, UV sensible polymer substrates like ABS can be used, see col. 6, lines 43-48.

On top of the pigment containing layer there may be a clear coating layer, see col. 4, lines 15-22.

According to the present invention, preferably an ASA substrate layer is employed so that the top layer need not contain pigments or dyes.

Ellison contains no pointer in the direction of using (co)extruded layers for

forming the laminated sheets or films.

The process according to the present invention has many advantages over the process according to Ellison: There is no need to use solvents which have to be removed during film formation. Solvents may constitute environmental and health risks. Furthermore, the use of solvents and their removal from the polymer cast films is expensive since solvent and energy have to be employed in the process.

The laminated sheets of the films according to the present invention circumvent these disadvantages of the prior art process.

In addition, according to the present invention it is easier to form layers which are thicker than the layers formed by liquid casting of the films.

US 5,747,568 (Fischer) relates to thermoplastic molding materials which may be used for producing automotive parts which have high impact strength in combination with good weather resistance and aging resistance, see col. 4, lines 46-52. The molding material is an ASA copolymer containing an alkyl acrylate grafting base having a styrene/acrylonitrile-copolymer grafted thereon. A styrene/acrylonitrile-copolymer is employed as the polymer matrix.

Since Fischer contains no indication of forming laminated sheets or films comprising the (co)extruded layers according to the present invention, and Ellison only describes the liquids cast films, even a combination of the two reference can not lead to the present invention.

GREFENSTEIN et al., Serial No. 08/987,775



Since the preparation of laminated sheets or films by (co)extruding different layers *per se* is new, the laminated sheets or films according to the present invention are not confined to ASA substrate layers.

It is submitted that the application is in condition to be allowed. Favorable action by the examiner is solicited.

Attached is a check in the amount of \$890.00 to cover the required three month extension fee.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF

A handwritten signature in dark ink, appearing to read "H B Keil".

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